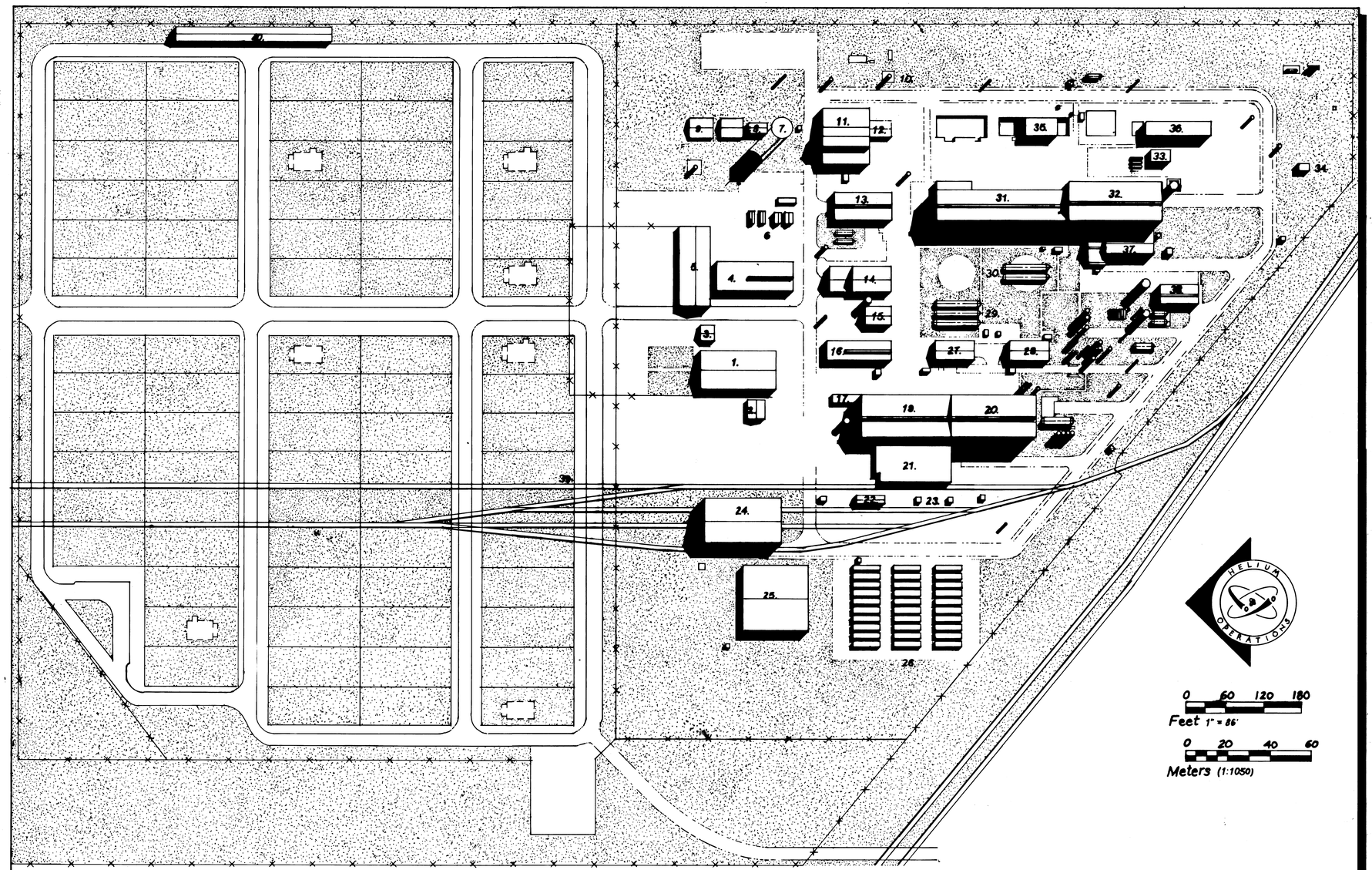
TRIM LINE

SITE PLAN
Exell Helium Plant



1. Plant Headquarters Building (1986)
2. Monitor Building (c.1960s)
3. Guard House (c.1956)
4. Garage (c.1943)
5. Warehouse (1986)
6. Maintenance Storage (c.1986)
7. Water Tower (1942-43)
8. Pump House (1942-43)
9. Settling Basins 2 (1942-43)
10. Cliffside Gas Intake Scrubbers (1986)
11. Cliffside Gas Treatment Building (1947)
12. Cliffside Gas Meter Building (1942)
13. Generator Building (1942)
14. Electrical and Welding Shops (1988)
15. Boiler Building (1986)
16. Change Building (1943)
17. Dewar Dock (1986)
18. Liquid Helium Storage Tank (c. 1980)
19. Separation Building (1942)
20. Separation Building Extension/ Control Room (1956)
21. Loading Dock (1942)
22. Pump House (1943)
23. Tank Car Filling Facilities (c. 1956)
24. Tank Car Maintenance Building (1986)
25. High Pressure Storage (1943)
26. Tank Car Storage Facilities (c. 1980)
27. Machine Shop (1943)
28. Lab Welding Shop (1943)
29. Crude Helium Storage (c. 1956)
30. Nitrogen Storage (c. 1956)
31. Compressor Building (1943)
32. Compressor Building Extension (1956)
33. Motor Control Center Building (1986)
34. Switch House (1956)
35. Cooling Tower (c. 1976)
36. Jacket Water Cooler (1956)
37. Generator Building (1986)
38. Pump House (1956)
39. Rail Extension (1986)
40. 18 Garages (1943)

1979-1998: Added and Removed Facilities

The final phase of Exell's technological upgrade occurred in 1979-80. As competition from private industry increased under the criteria articulated in the Helium Conservation Act of 1960, Exell emerged as the Bureau of Mines' predominant producer. When the Keyes, Oklahoma, plant closed in 1981, Exell remained the only federal helium plant in production until privatization in 1996.

Exell upgraded its technology in 1979-80 to meet existing demands. In 1979, CTI-Cryogenics, a division of the Helix Technology Corporation, installed a cryogenic purification unit and a 500 liter-per-hour helium liquefier. The following year, the Hudson Engineering Company installed a Pressure Swing Adsorption unit (PSA), which used a molecular sieve as an absorbing medium, replacing the antiquated activated charcoal absorption system in use since the 1940s. In 1986, the bureau installed new CO2 Removal and Nitrogen-drying units.

By the mid-1990s, the Exell Helium Plant had become increasingly dependent on privately manufactured technology to keep up with current demands for helium. Congress' decision in 1996 to privatize the helium industry, effectively terminated the government's involvement in helium production.

With the downsizing of the federal government and the privatization of certain operations, the U.S. Bureau of Mines Helium Activities permanently ceased its operations in 1998. After the subsequent abolishment of the U.S. Bureau of Mines in 1996 the agency's functions at the Amarillo and Exell plants transferred to the Bureau of Land Management (BLM). In 1998, the BLM sought assistance from the National Park Service and entered into an agreement with that agency to provide for a survey and inventory of historic and archeological properties. Both the archeological surveys and the Historic American Engineering Record (HAER) documentation project were able to mitigate the loss of these former federal properties due to their transfer of ownership.

HISTORIC AMERICAN ENGINEERING RECORD
TX-105 B

SHEET 2 OF 9

US BUREAU OF MINES, HELIUM PLANT 1943
HIGHWAY 287N,
MOORE COUNTY
TEXAS

HELIUM ACTIVITIES RECORDING PROJECT
MASTERSON

DELINEATED BY: TOM CHENEY 2001

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
HISTORIC AMERICAN ENGINEERING RECORD

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